

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

ARAVIND R. TARUGU and DR. RAJU C.	:	CIVIL ACTION
REDDY,	:	
	:	
	:	No: 2:19-cv-01256-LPL
Plaintiffs,	:	
	:	
v.	:	
	:	
JOURNAL OF BIOLOGICAL CHEMISTRY	:	JURY TRIAL DEMANDED
and AMERICAN SOCIETY OF	:	
BIOCHEMISTRY AND MOLECULAR	:	ELECTRONICALLY FILED
BIOLOGY,	:	
	:	
Defendants.	:	
	:	

FIRST AMENDED COMPLAINT

Plaintiffs, Mr. Aravind R. Tarugu (“Mr. Tarugu”), and Dr. Raju C. Reddy, MD (“Dr. Reddy”), by and through their undersigned counsel, and hereby file the within First Amended Complaint against Defendants, Journal of Biological Chemistry, Inc. (the “JBC”) and American Society for Biochemistry and Molecular Biology, Inc. (the “ASBMB”) (the JBC and the ASBMB collectively, “Defendants”). As set forth below, Mr. Tarugu and Dr. Reddy bring claims against Defendants sounding in defamation, which causes of action arise from Defendants publication of false and defamatory statements which accuse Mr. Tarugu and Dr. Reddy of falsifying data in an academic research article published in the Journal of Biological Chemistry, thereby severely injuring Mr. Tarugu’s and Dr. Reddy’s professional reputations, as well as causing each to suffer significant mental anguish and personal humiliation. For their First Amended Complaint, Mr. Tarugu and Dr. Reddy (the “Authors”) aver as follows:

THE PARTIES

1. Plaintiff, Mr. Tarugu is an individual residing in the Commonwealth of Pennsylvania.

2. At all relevant times, Mr. Tarugu was, and still is, an employee of the University of Pittsburgh (the “University”).

3. Plaintiff, Dr. Reddy is an individual residing in the Commonwealth of Pennsylvania.

4. At all relevant times, Dr. Reddy was, and still is, a Visiting Associate Professor of Medicine at the University’s Department of Medicine, as well as the Chief of Pulmonary Division, Department of Veteran Affairs, Pittsburgh Healthcare System (the “VAPHS”).

5. Upon information and belief, defendant JBC, is a corporation, incorporated in the State of Maryland, and is a wholly owned subsidiary of the ASBMB.

6. The JBC publishes scientific articles which fall under the scientific fields of chemistry, biochemistry, biophysics, systems biology, RNA biology, immunology, microbiology, neurobiology, epigenetics, and computational biology, among others.

7. Upon information and belief, the JBC has its principle place of business in the State of Maryland.

8. Defendant ASBMB is a corporation incorporated in the State of Maryland.¹

9. The ASBMB is a society comprising of roughly 12,000 members, and owns and operates a number of different scientific publications, including the JBC.

10. Upon information and belief, the ASBMB regularly publishes scientific articles

¹ MARYLAND BUSINESS EXPRESS, <https://egov.maryland.gov/BusinessExpress/EntitySearch/BusinessInformation/F15818081> (last visited August 5, 2019) (showing the ASBMB’s current registration status as a business in good standing in the State of Maryland).

by itself, and through its subsidiaries, such as the JBC.

11. Upon information and belief, the ASBMB has its principle place of business in Rockville, Maryland.²

JURISDICTION AND VENUE

12. Upon information and belief, the JBC is a wholly owned subsidiary of the ASBMB, and is incorporated under the laws of the State of Maryland, with its principal place of business in the State of Maryland.

13. Upon information and belief, the ASBMB is incorporated under the laws of the State of Maryland, with its principal place of business in the State of Maryland.

14. Dr. Reddy is a citizen of the Commonwealth of Pennsylvania.

15. Mr. Tarugu is a citizen of the Commonwealth of Pennsylvania.

16. Upon information and belief, the Defendants knew that the Authors were citizens of the Commonwealth of Pennsylvania, are employees of the University, and published the Article on behalf of the University.

17. The defamatory statements, as discussed in detail below, published by the Defendants were specifically directed at the Authors, who are residents and employees of the Commonwealth of Pennsylvania.

18. The brunt of the harm and injury to the Authors' reputations within the scientific community at the University, and their local community, occurred in the Commonwealth of Pennsylvania, the focal point of the Defendants' tortious conduct.

19. This Court has jurisdiction pursuant to 28 U.S.C. § 1332(c) based on diversity of

² AMERICAN SOCIETY FOR BIOCHEMISTRY AND MOLECULAR BIOLOGY, www.asbmb.org (last visited August 5, 2019) (stating ASBMB's address is 11200 Rockville Pike, Suite 302, Rockville, MD 20852-3110).

citizenship and an amount in controversy which exceeds \$75,000.00, exclusive of interest and costs.

20. Venue is proper pursuant to 28 U.S.C. § 1391(a)(2), and the dispute is governed by the law of the Commonwealth of Pennsylvania.

STATEMENT OF FACTS

The Joint Inquiry and Investigation

21. Mr. Tarugu and Dr. Reddy are two of the co-authors of Lakshmi SP, Reddy AT, Zhang Y, Sciurba FC, Mallampalli RK, Duncan SR, and Reddy RC, The Journal of Biological Chemistry 289(10):6383-6393 (2014), “Down-regulated peroxisome proliferator-activated receptor γ (PPAR γ) in lung epithelial cells promotes a PPAR γ agonist-reversible phenotype in chronic obstructive pulmonary disease (COPD)” (the “Article”), a scientific article published on behalf of the University. **Exhibit A.**

22. On December 24, 2013, Dr. Reddy and Mr. Tarugu, along with five other co-authors, published the Article in the Journal of Biological Chemistry.

23. The Article assessed the actions of peroxisome proliferator-activated receptor γ (gamma) (“PPAR γ ”) in pulmonary epithelial cells of chronic obstructive pulmonary disease (“COPD”)³ patients.

24. The Article includes nine (9) figures with multiple subpanels, which consist of: measurement of cytokine and chemokine levels, determination of cellular ROS levels, HDAC activity, transcription factor DNA binding activity assays, ChIP assays, quantitative real-time PCR, and siRNA experiments, among other things.

³ COPD is a progressive lung disease that is presently a leading cause of death in the United States.

25. The Article also consists of 147 immunoblots lanes,⁴ with a total of 644 individual bands,⁵ presented in support of the conclusions made within the main body of the Article.

26. On October 8, 2015, the Authors were notified that they would be subject to an inquiry (the “Inquiry”) to determine, among other things, the provenance of certain immunoblots used in Figure 5E.

27. Specifically, the Inquiry was focused on whether the left lane in the left panel in the β -actin blot of Figure 5E was the same as the left lane in the right panel of the pMSK1 blot, but just oriented differently.

28. Figure 5, of which 5E is a part, is comprised of data from multiple experiments conducted by the Authors, and is presented in the Article to support the finding that PPAR γ activation decreases CSE-induced cytokine production and oxidative stress by modulating NF- κ B.

29. Figure 5E specifically displays an immunoblot showing levels of COX-2, NOX4, pIKK α , p-I κ B α , p-MSK1, and NF- κ B p65.

30. Graphically, Figure 5E includes 18 lanes of immunoblots scanned by the Authors using a LICOR Imaging System.⁶ See Exhibit A at 6388.

31. A part of the data provided in Figure 5E includes pMSK1 with vehicle/OA-NO₂ treatment, which was not central to the Article or the conclusions made therein.

32. The Inquiry panel met on February 1, 2016, and was conducted jointly by the

⁴ An immunoblot—also known as a Western Blot—is a method employed by researchers to detect specific proteins present in tissue samples.

⁵ Proteins separated in a porous gel form thin, sharply defined shapes referred to as “bands” and a horizontal row of bands is referred to as a “lane.”

⁶ A LICOR Imaging System is designed to scan and analyze immunoblots.

University and the VAPHS.

33. At the request of the VAPHS, the University led the Inquiry, and was responsible for collecting and examining evidence, as well as hearing and observing oral testimony provided by witnesses.

34. Upon completion of the Inquiry, on February 18, 2016, the Panel issued an inquiry report (the “Inquiry Report”) which did not recommend that a formal investigation be conducted.

35. On February 18, 2016 the Authors were given a copy of the Inquiry Report, and were told that “the Panel recommended that the procedure be terminated without an investigation and without a finding of misconduct.”

36. On or about April 26, 2016, and coming as a great surprise to the Authors, Assistant Dean of Academic Affairs for the University, Dr. Saleem A. Khan (“Dean Khan”), notified the Authors that they would be subject to an investigation concerning the provenance of Figure 5E in the Article because The Office of Research Oversight of the Department of Veteran Affairs (the “VA ORO”) had lingering reservations about the Inquiry Report.

37. The University and the VAPHS formed an “Investigative Board,” and agreed that the University would lead the investigation.

38. On July 15, 2017, the Investigative Board issued its report which opined that Mr. Tarugu had reused the p-MSK1 immunoblot within Figure 5E (the “Investigative Board Report”).

39. After receipt of the Investigative Board Report, both the University and the VA ORO issued separate determinations (the “University Determination” and the “VA ORO Determination”), both of which the Authors appealed.

40. The Authors appealed the University Determination to the University's appeal panel (the "University Appeal Panel") on November 27, 2017.

41. The Authors similarly sought to appeal the VA ORO Determination, and filed a formal appeal on December 14, 2017 with the VA ORO.

42. On or about March 29, 2018, the University Appeal Panel issued its report unanimously overturning the Investigative Board's decision (the "University Appeal Panel Report"), thereby absolving Mr. Tarugu of any research misconduct.

43. In doing so, the University Appeal Panel determined that "intention was not proven by a preponderance of evidence, including a lack of proof for purposeful image manipulation."

44. The Panel also noted the lack of a motive for reuse of the image, as the figure panel at the center of the investigation was not essential for the Article's conclusions.

45. The University Appeal Panel relied upon independent experts in reaching its conclusion that the first lane from the lower β -actin immunoblot in Figure 5E was not reused in the right pMSK1 immunoblot also present in Figure 5E.

46. On April 4, 2018, then University Provost Patricia Beeson, adopted the University Appeal Panel Report in her final decision after appeal (the "University's Final Decision").

47. Subsequently, a panel of scientist-investigators and legal counsel for the National Institutes of Health (NIH) Office of Research Integrity (ORI) (collectively, "NIH-ORI") conducted a thorough and complex review, and accepted the University's decision concluding that no misconduct or reuse of the immunoblot occurred.

48. However, on May 25, 2018, notwithstanding the University's Final Decision in favor of Mr. Tarugu, and the weight of the supporting evidence, the VA ORO erroneously denied

the Author's appeal of the VA ORO Determination, reasserting that in Figure 5E, the first band from the lower β -actin immunoblot was reused as the first band in the right pMSK1 immunoblot (the "VA ORO Findings").

49. The VA ORO Findings were not based on a preponderance of evidence as required by the VHA Handbook 1058.02, Department of Veterans Affairs, Veterans Health Administration (2014).

50. The VA ORO Findings included a corrective action plan for Mr. Tarugu which, among other things, directed him to notify the JBC by August 10, 2018 of the VA ORO Findings.

Defendants' Independent Examination Outside the Scope of the Joint Investigation

51. In compliance with the VA ORO's corrective action plan, on August 10, 2018, Mr. Tarugu notified the JBC, by letter addressed to Dr. Kaoru Sakabe, the ASBMB's Data Integrity Manager, of the VA ORO Findings (the "Notice"). *See Exhibit B.*

52. With his Notice, Mr. Tarugu provided a copy of the University's Final Decision, which had been redacted at the recommendation of the University.

53. In the Notice, Mr. Tarugu vigorously disputed the VA ORO Findings and maintained that no action should be taken by the JBC with regard to the Article.

54. Mr. Tarugu asserted that the VA ORO's conclusion that in Figure 5E, the first band in the right panel of the pMSK1 blot was reused was erroneous and contrary to the preponderance of evidence, and provided the JBC with independent expert reports in support of his contention.

55. Thereafter, the JBC initiated its examination of Figure 5E, and then, unilaterally, expanded its examination beyond the scope of the VA ORO Findings, and the Notice that Mr.

Tarugu had provided to the JBC (the “JBC Examination”).

56. Specifically, on August 16, 2018, without explaining why, the JBC requested that the Authors provide the original data for Figures 3C, 4C, and 5E.

57. The JBC’s own policy and the policy from the Council of Science Editors both state that if there is a concern about an image, the journal should notify the author as to what the concern is, ask for an explanation, and request that data be provided.

58. However, the JBC never informed the Authors that they would be conducting an independent investigation, never notified the Authors about the JBC’s concerns regarding the images, and never shared the guidelines for the JBC Examination.

59. With regard to the additional information requested by the JBC, Figure 3, of which 3C is a part, is presented in the Article to support the finding that CSE down-regulates anti-inflammatory transcription factors PPAR γ and GR- α .

60. Figure 3C specifically displays an immunoblot of nuclear GR- α and acetylation of immunoprecipitated GR- α .

61. Whereas Figure 4, of which 4C is a part, is presented in the Article to support the finding that CSE down-regulates HDAC2 and increases chromatin acetylation.

62. Figure 4C specifically displays immunoblots showing acetyl- and phospho-histone H3 (Lys-9/Ser-10) and total histone H3, acetylated (Lys-12), and total histone H4.

63. On August 20, 2019, in the spirit of cooperating with the JBC Examination, the Authors provided all data relevant to the JBC’s request for original data for Figures 3C, 4C, and 5E.

64. On August 21, 2018, the JBC requested that the Authors provide further data, this time requesting the zip files from the LICOR Imaging System used by the Authors during their

research.

65. Although the Authors desired to be cooperative and provide the requested data, on August 22, 2018, the Authors informed the JBC that they no longer had access to the requested zip files because the LICOR Imaging System used to generate the images was no longer operational and had been replaced by an upgraded system.

66. The Authors, through their counsel, also stated “[p]lease let me know if there is anything else I can do to assist you.” *See Exhibit C.*

67. Despite their offer, the Authors did not receive any further communications from the JBC regarding the availability of data from the LICOR system.

68. On August 23, 2018, Dr. Sakabe requested that the Authors produce unredacted copies of the University’s Final Decision, the University Appeal Panel Report, and the VA ORO Findings *See Exhibit D.*

69. On or about August 29, 2018, Dr. Sakabe also requested that the Authors provide the original data for Figures 1A and 6A (the “Additional Figures Request”). *See Exhibit D.*

70. Figure 1, of which Figure 1A is a part, is presented in the Article to support the finding that PPAR γ expression and activity are decreased in COPD.

71. Figure 1A specifically displays an immunoblot for PPAR γ in tissue extracts of pathologically normal (non-COPD; n=6) and COPD (n=6) lung (top panel) and in whole-cell extracts of HBE cells obtained from normal and COPD subjects (bottom left panel) followed by densitometric analysis (bottom center panel).

72. The bottom right panel shows DNA binding activity of PPAR γ in non-COPD and COPD tissue extracts measured using an ELISA-based assay.

73. Whereas Figure 6, of which 6A is a part, is presented in the Article to support the

finding that PPAR γ activation reverses CSE-induced changes in PPAR γ , GR- α , and HDAC2, as well as in chromatin acetylation.

74. Figure 6A specifically displays immunoblots showing nuclear levels of PPAR γ , GR- α , and HDAC2.

75. It also displays immunoblots showing acetyl- and phospho-histone H3 (Lys-9/Ser-10) and total histone H3, as well as acetylated (Lys-12) and total histone H4.

76. On August 30, 2018, the Authors responded to Dr. Sakabe and politely declined to provide unredacted copies of the University's Final Decision, the University Appeal Panel Report, and the VA ORO Findings, as well as data responsive to Additional Figures Request. *See Exhibit D.*

77. They did so (a) because the University's Final Decision and University Appeal Panel Report had been redacted at the suggestion of Dean Khan to protect Mr. Tarugu's confidential information (*see Exhibit D-1*),⁷ and (b) because the VA ORO Findings were not going to be published and that Mr. Tarugu was entitled to maintain the confidentiality of the findings of the report.

78. The Authors also declined to provide the data responsive to the Additional Figures Request because the request substantially deviated from the scope of the subject matter of the VA ORO Findings and the Notice, and Mr. Tarugu's obligation to notify the JBC of the VA ORO Findings with respect to Figure 5E. *See Exhibit D.*

79. However, in an effort to better understand the basis for the Additional Figures Request, the Authors requested that the JBC clarify why it had made the request, and for what purpose.

⁷ Exhibits include attachments redacted when originally transmitted between the parties.

80. Although the JBC never responded to the Authors' request, on September 12, 2018, in a further attempt to demonstrate their good faith intentions, the Authors provided the requested image data for Figures 1A and 6A.

81. They also reaffirmed their willingness to continue to cooperate in any way they could with respect to additional questions the JBC may have had regarding the β -actin and pMSK1 blots in Figure 5E. *See Exhibit E.*

**JBC/ASBMB's Failure to Exercise Reasonable Diligence in Ascertaining the Truth and or
Reckless Disregard of the Truth**

82. On August 31, 2018, Dr. Sakabe told the Authors that in addition to the alleged duplication in Figure 5E, the JBC had determined that "[t]he PPAR γ blot from Fig 1A was reused in Fig 6A as pAcK-H3 and H3" and that "[t]he Lamin B1 blot from Fig 3C was reused in Fig 4C as H3" (the "JBC Findings"). *See Exhibit F.*

83. Dr. Sakabe did not offer any explanation or justification for the JBC Findings, but, rather, simply stated that "the Editors are requesting that the [A]uthors withdraw the [A]rticle." *Id.*

84. On September 6, 2018, the Authors, perplexed by the JBC's unexplained and unsupported determinations, contacted Dr. Sakabe to express their confusion, and to request that Dr. Sakabe provide "the journal's basis/analysis for determining that the images were reused."

85. They made the request so that they could address the JBC's obvious concerns regarding the images, and, by doing so, assist the JBC in its analysis of the applicable images to ensure that the JBC correctly, and in an unbiased fashion, arrived at the truth of the matter: that the images had not been reused as alleged.

86. On September 7, 2018, in an apparent refusal to be transparent or to engage with the Authors to ascertain the truth, Dr. Sakabe responded that the information requested by the

Authors on September 6, 2018 had already been provided with the JBC Findings contained within Dr. Sakabe's August 31, 2018 email.

87. The immunoblot images provided by the Authors readily demonstrate that the images are unique and distinct and were not re-used.

88. The Authors did not receive any report from the Defendants, which runs afoul of general guidelines and policies governing the investigation of such allegations.

89. The JBC Findings were devoid of any information that addressed the source of the images used in the JBC's analysis, the software tools and methodologies it used to conduct the analysis, or any interpretations the JBC was able to derive from its analysis.

90. The JBC Findings did not otherwise include any additional explanatory language.

91. The so-called analysis and basis for the JBC Findings, as delivered to the Authors, merely consisted of pictorial information with a small amount of highlighting.

92. This complete lack of information prevented the Authors from understanding how the JBC reached its conclusions regarding the alleged image duplication and reuse.

93. Moreover, the JBC's general lack of transparency and refusal to provide critical information during the process, prevented the Authors from meaningfully responding to the JBC's prior inquiries that were well beyond the scope of the Notice, and hampered the Authors efforts to aid the JBC in ascertaining the truth.

94. Upon information and belief, the JBC (a) only utilized snapshots of images taken from a .PDF file of the Article to perform its image analysis, in contravention of its own policies and recommended best practices, and (b) simply applied a color gradient analysis to Figures 1A, 6A, and 5E to determine if the images were duplicated.

95. Upon information and belief, the JBC utilized a naked eye comparison of figures

3C and 4C.

96. An analysis based on snapshots of images and/or naked eye comparisons of images that have been produced as part of a highly technical and sophisticated experimentation, is wholly inadequate.

97. Upon information and belief, the JBC failed to perform histogram equalization, image segmentation, sobel gradient, thresholding, or any other relevant technique on any of the images provided to the JBC.

98. Had the JBC employed the above referenced techniques as part of its analysis, it would have been able to conclusively determine that each and every image contained in the Article was unique and distinct.

99. On or about September 12, 2018, the Authors responded to the JBC's September 7, 2018 email in detail, and explained why the analysis included in the JBC Findings was deficient and did not support the JBC's conclusion of duplication and reuse (the "Authors' Response").

100. Specifically, the Authors identified that had the JBC followed the image analysis procedures as outlined by the Department of Health and Human Service's Office of Research Integrity, it would be apparent that no duplication or reuse of the images in Figures 1A, 6A, 3C, 4C, or 5E had occurred.

101. With the Authors' Response, the Authors provided a total of 37 .TIFF files of images related to the five figures, and a detailed and rigorous image analysis addressing each figure (the "Image Analysis").

102. The Authors performed and provided the Image Analysis, which adhered to the Department of Health and Human Service's Office of Research Integrity guidelines.

103. It did so because the information provided by the JBC to support its analysis was woefully inadequate, and the JBC had ignored the Authors' multiple requests that the JBC provide additional information that explained the JBC Findings and erroneous conclusions.

104. The Image Analysis utilized the following techniques:

NIH Office of Research Integrity (ORI) Advanced Forensic Actions tools in Adobe Photoshop: In this process, histogram equalized images are applied with advanced dark or light areas and advanced gradient map to determine the similarities or differences between images. The preset actions allow the user to limit personal biases.

Image segmentation, thresholding, and sobel gradient in MATLAB Image Processing Toolbox: In this process, histogram equalized images are portioned into regions based on the pixel characteristics of the image. This process discloses the discontinuities in pixel values and indicated edges, and eliminates biases as the process is performed as a coded program.

Reference to notebook entries: Along with image analysis and original images, the Authors provided lab notebook entries related to Figure 5E β -actin and pMsk1 performed approximately 6 months apart by two different researchers.

105. The Image Analysis highlighted several key differences between the images, including (a) several differences in excised borders of membrane and its size, (b) the presence of protein marker lanes in the blots, (c) several differences in heatmaps and gradient maps of images and bands; and (d) several differences in the backgrounds of the images.

106. The Image Analysis conducted on the original, high quality .TIFF files, conclusively demonstrated that each immunoblot used in the Article is, in fact, unique and distinct.

107. As part of the Authors' Response, they also included the results of an independent forensic image analysis performed by Dr. John Russ, an expert in the field, which similarly found that the images utilized in the Article were unique and distinct. *See Exhibit G at 13.*

108. The Authors did not expect the Defendants to take the Image Analysis and accompanying documents for granted, but rather expressly implored the Defendants to see the error in their apparent methodology, and to employ a reasonable, proper, and complete analysis of the images used to produce factual evidence -- which would have conclusively shown that no duplication or reuse of the images in Figures 1A, 6A, 3C, 4C, or 5E had occurred.

109. On the same day that she received the Authors' Response, Dr. Sakabe inexplicably responded, in conclusory fashion, that

Because [the Authors] refused to provide the original data and images for figures 1A and 6A, any criticism of the JBC processes are the result of [the Authors'] failure to provide requested and required information. The images in the PDF provided are of too poor quality for JBC to analyze. The data shown in the attachment for figures 3C and 4C do not appear to correspond with what is presented in the [Article]. The quality of the data provided on August 20 was of such poor quality that we requested the native files, but none were provided. Finally, we requested full copies of the investigation reports to determine the rigor and completeness of the committee's investigation.

See Exhibit G.

110. At no time before September 12, 2018 did the JBC ever raise any issues concerning the quality of images provided by the Authors.

111. The JBC grossly mischaracterized the nature of its correspondence with the Authors, which was pointed out in detail via letter correspondence on September 14, 2018.

112. However, Dr. Sakabe and the JBC refused to reconsider their findings, even though they were based solely on images from a .PDF file, which Dr. Sakabe admitted were inadequate.

113. The JBC's refusal to reconsider the JBC Findings, even after the Authors had exposed inaccuracies in those findings, both forensically and procedurally, demonstrates that the JBC acted in reckless disregard of the overwhelming evidence that its findings as to Figures 1A,

6A, 3C, 4C, and 5E were incorrect, and, at a minimum, that the JBC failed to exercise reasonable diligence in pursuit of the truth with regard to the accuracy of the relevant images. *See Exhibit H.*

114. The JBC thereafter referred the matter to the ASBMB Publications Committee (the “Publications Committee”) for review. *See Exhibit I.*

115. In yet another attempt to ensure that the Defendants were engaged in a reasonable and diligent search for the truth, and did not recklessly disregard the falsity of its conclusions, on or about September 19, 2018, the Authors asked the JBC to: (a) “provide a copy of the Editors’ analyses and reports describing the techniques they used to review the data/images we provided from August 10, 2018 through September 14, 2018,” (b) “confirm that our September 14 emails (and all attachments) were shared with the Editors,” (c) “forward the guidelines/policies which will apply to and govern the Publications Committee’s consideration of this matter,” and (d) “confirm that all of our communications with [Dr. Sakabe], beginning with our August 10, 2018 letter, will be made available to the ASBMB Publications Committee.” *See Exhibit J.*

116. Again, Dr. Sakabe, the JBC, and now the ASBMB, failed to engage meaningfully with the Authors.

117. Other than providing a hyperlink to the JBC’s website, the Defendants refused to share any of the reports, processes, policies, or methods employed by the JBC in its image analysis.

118. Specifically, Dr. Sakabe informed the Authors that: “[w]e will not share further internal analyses/reports.”

119. On September 21, 2018, the Authors, by way of letter correspondence to Dr. Enrique M. De La Cruz, Chair of the Publications Committee, again tried to ensure that the

Defendants were adhering to appropriate procedures, were diligently examining all the relevant data, and were diligently considering evidence that conclusively showed that the images were not reused. *See Exhibit K.*

120. On October 1, 2018, Dr. Sakabe acknowledged receipt of the letter addressed to Dr. De La Cruz, but the Defendants failed to forward to the Authors the requested guidelines or policies which applied to the Publications Committee's consideration of the Article.

121. In fact, the Authors did not receive any communications from the Defendants until November 21, 2018.

122. It was only then that the Defendants advised, after an alleged careful consideration of the matter, that the Publications Committee had determined that the "images had been reused to represent different experimental conditions," and that the Article was to be retracted.

123. Upon information and belief, the ASBMB failed to adequately consider the evidence provided by the Authors.

124. On November 30, 2018, in a final effort to engage with Defendants, the Authors contacted Dr. Gerald Hart, President of the ASBMB, Barbara Gordon, Executive Director at the ASBMB, and Nancy Rodnan, Senior Director of Publications at the ASBMB. *See Exhibit L.*

125. However, the Authors did not receive a response.

126. Although the Authors never received notice that the JBC was conducting an independent investigation, they reasonably cooperated with the Defendants' requests and provided images and reports despite not having an obligation to do so.

127. The Defendants, on the other hand, while engaging in an incomplete and misleading image analysis, never notified the Authors of their concerns regarding the Article,

never indicated that they would be initiating an investigation, and never shared any guidelines or reports of the investigation, all of which demonstrates a complete lack of transparency and cooperation, and shows that the Defendants acted with a reckless disregard of the truth.

128. The Defendants further acted with reckless disregard when they made their unilateral determination that the Authors had reused images in the Article without regard to pertinent factual evidence, by not performing image analysis on the original images, by promoting an image analysis performed on a .PDF file although knowing it to be an inadequate manner of analysis that was capable of providing false results (which ultimately happened in this case), by not providing an opportunity for the Authors to provide their response to the JBC's determination, to comment on the retraction, to provide their perspective to the readers of the Journal, and, thus, the scientific community.

129. Thereafter, on or about December 6, 2018, the Defendants retracted the Article and published the retraction notice (the "Retraction") on their publically accessible webpage.

130. The Retraction states in full:

Retraction: Down-regulated peroxisome proliferator-activated receptor γ (PPAR γ) in lung epithelial cells promotes a PPAR γ agonist-reversible proinflammatory phenotype in chronic obstructive pulmonary disease (COPD).

Sowmya P. Lakshmi, Aravind T. Reddy, Yingze Zhang, Frank C. Sciurba, Rama K. Mallampalli, Steven R. Duncan and Raju C. Reddy

VOLUME 289 (2014) PAGES 6383–6393

This article has been retracted by the publisher. The right pAcK-H3 and H3 immunoblots from Fig. 6A were reused in Fig. 1A as PPAR γ . The right Lamin B1 immunoblot from Fig. 3C was reused in Fig. 4C as the right H3 immunoblot. In Fig. 5E, the first lane from the lower β -actin immunoblot was reused in the right pMSK1 immunoblot.

JOURNAL OF BIOLOGICAL CHEMISTRY, <http://www.jbc.org/content/294/1/69> (last visited August 5, 2019).

131. The Retraction contains three separate and distinct, false and defamatory statements.

132. The first false and defamatory statement is that “[t]he right pAcK-H3 and H3 immunoblots from Fig. 6A were reused in Fig. 1A as PPAR γ .”

133. The second false and defamatory statement is that “[t]he right Lamin B1 immunoblot from Fig. 3C was reused in Fig. 4C as the right H3 immunoblot.”

134. The third and final false and defamatory statement is that “[i]n Fig. 5E, the first lane from the lower β -actin immunoblot was reused in the right pMSK1 immunoblot.”

135. On or about January 4, 2018 the Retraction was publically posted by the twitter handle @Sciblotter.

136. @Sciblotter is a twitter handle dedicated to tweeting alerts to its subscribers which detail instances where scientific articles have been retracted.

137. @Sciblotter’s sole function is to report on article retractions.

138. @Sciblotter has thousands of followers, who, upon information and belief, are largely comprised of members of the academic and scientific communities of which the Authors are members.

COUNT I
(Defamation Seeking Permanent Injunctive Relief – The JBC and The ASBMB)

139. The Authors incorporate by reference the foregoing paragraphs of this First Amended Complaint as if set forth at length herein.

140. Under Pennsylvania law, to succeed on a claim of defamation, a plaintiff must prove: (1) the defamatory character of the communication; (2) its publication by the defendant;

(3) its application to the plaintiff; (4) the understanding by the recipient of its defamatory meaning; (5) the understanding by the recipient of it as intended to be applied to the plaintiff; (6) special harm resulting to the plaintiff from its publication; and (7) abuse of a conditionally privileged occasion. *Kelley v. Pittman*, 150 A.3d 59, 67 (Pa. Super. 2016) (quoting *Porter v. Joy Realty, Inc.*, 872 A.2d 846, 849 n. 6 (Pa. Super. 2005)); *see also* 42 Pa.C.S.A. § 8343(a).

141. By agreeing to publish the Retraction, the Defendants caused the publication of three false statements and misrepresentations of fact to scientific community.

142. Moreover, upon information and belief, the Defendants are directly responsible for, and proximately caused, @Sciblotter's mass dissemination of the three defamatory and false statements contained in the Retraction to thousands of members of the academic and scientific community.

143. The Retraction contains three distinct false and defamatory statements: (a) "The right pAcK-H3 and H3 immunoblots from Fig. 6A were reused in Fig. 1A as PPAR γ ," (b) "The right Lamin B1 immunoblot from Fig. 3C was reused in Fig. 4C as the right H3 immunoblot," and (c) "In Fig. 5E, the first lane from the lower β -actin immunoblot was reused in the right pMSK1 immunoblot."

144. The three statements in the Retraction can fairly and reasonably be construed to imply defamatory meaning in that each of the three offending statements is patently false, and are misrepresented as true facts.

145. The Authors did not, in fact, reuse images, rather they utilized individual, distinct, and unique images in and throughout the Article.

146. The statements indicate that the basis for the Article's retraction was the alleged reuse of images within the Article.

147. An accusation that an image has been surreptitiously reused in a scientific article is tantamount to an accusation of data falsification, research impropriety, and/or research misconduct, any of which constitute the ultimate breach of trust an author can commit within the scientific community.

148. Moreover, the defamatory meaning could not be more evident to the Authors, or to the greater scientific community, for the impression it would naturally engender in the minds of the average persons among whom it was intended to circulate -- the Authors' academic peers - - is obvious as both harmful and untrue.

149. Adding insult to injury is the fact the Retraction was non-consensual.

150. The Retraction directly implicates and directly applies to the Authors because the Retraction lists the Authors by name.

151. Moreover, any recipient of the Retraction (i.e., a reader of the Retraction), would readily understand that the Retraction applies to the Authors as it lists the Authors by name.

152. That the Authors were not distinctly identified as the individuals implicated by the false and defamatory statements in the Retraction is immaterial.

153. Within the sphere of academia (the audience for the publication of the journal at issue) the meaning of each of the three individual defamatory statements is clear -- the authors of the Article were found to have improperly reused images in the Article, specifically those referenced in each of the statements in the Retraction.

154. Any career academic would reasonably understand the gravity of such a statement being published to the public at large, and the reputational harm and impact it would cause and continue to cause.

155. Due to the publication of the Retraction by the Defendants, the Authors have

already suffered significant impairments to their reputation and standing within the University community, as well as within the greater academic community as a whole.

156. The Authors have had professional opportunities delayed and or revoked, as well as additional publication opportunities jeopardized.

157. Any future work by the Authors or other scientists based on the conclusions of this Article will be questioned (even when the results of the Article are reproduced), because a reader of the Retraction will have no ability to ignore the false statements published in the Retraction.

158. In addition, the retraction of the Article has caused the Authors to suffer severe mental anguish and personal humiliation.

159. The Defendants abused their conditionally privileged status, if any, when they recklessly disregarded the truth by publishing Retraction, or at a minimum, negligently disregarded the truth, despite the falsity of the three statements contained therein.

160. In addition to the codified requirements set forth in 42 Pa.C.S.A. § 8343(a), the United States Supreme Court has held that while “the States may define for themselves the appropriate standard of liability for a publisher . . . of defamatory falsehood injurious to a private” plaintiff, they may only do “so long as they do not impose liability without fault.” *Gertz v. Robert Welch, Inc.*, 418 U.S. 323, 347, 94 S. Ct. 2997, 3010, 41 L. Ed. 2d 789 (1974).

161. The Pennsylvania Supreme Court has stated that where the plaintiff is a private figure plaintiff, the plaintiff must, at a minimum, prove the defendant was negligent in its publication. *Joseph v. Scranton Times L.P.*, 129 A.3d 404, 428 (Pa. 2015); *see also Rutt v. Bethlehems’ Globe Pub. Co.*, 484 A.2d 72, 83–84 (Pa. Super. 1984) (“We hold that a private figure defamation plaintiff . . . must prove that the defamatory matter was published with ‘want

of reasonable care and diligence to ascertain the truth’ or, in the vernacular, with negligence.”); *Tucker v. Philadelphia Daily News*, 848 A.2d 113, 130, n.22 (Pa. 2004) (“a private individual is not required to prove actual (constitutional) malice, but may recover upon a showing of negligence.”).

162. Unlike private figures, “the Supreme Court has mandated that public figures are required to demonstrate ‘actual malice’ on the part of the publisher by clear and convincing evidence in order to recover under state defamation law.” *Mzamane v. Winfrey*, 693 F.Supp.2d 442, 497 (E.D. Pa. 2010) (citing *New York Times v. Sullivan*, 376 U.S. 254, 279–80 (1964)).

163. The “actual malice” standard has been applied to limited purpose public figures as well. *See Tucker v. Philadelphia Daily News*, 848 A.2d 113, 130, n.22 (Pa. 2004).

164. A finding of actual malice is appropriate where a defendant had obvious reasons to doubt the veracity of the information up which they relied in their publication, “such as where the defendant is aware of internal inconsistencies or has access to apparently reliable information that contradicts the defamatory assertions.” *Mzamane*, 693 F.Supp.2d at 497.

165. The Authors can be considered private individuals for purposes of defamation (a) because the Retraction fails to address the sum and substance of the Article, and (b) because the controversy at issue was expressly confidential and private as between the Authors, the University, the VA ORO, and, ultimately, the Defendants.

166. To the extent that the Authors are determined to be private individuals for purposes of their defamation claim, the Author must prove that Defendants, in publishing the Retraction, failed to exercise reasonable care and diligence to ascertain the truth of the statements contained in the Retraction.

167. To the extent that the Authors are determined to be limited purpose public figures,

the Authors must prove that Defendants, in publishing the Retraction, acted with actual malice.

168. The Defendants knew that findings of the University and the VA ORO only pertained to Figure 5E, and did not opine as to Figures 1A, 6A, 3C, and 4C.

169. The Defendants knew that the findings of the University contradicted the findings of the VA ORO concerning the reuse of Figure 5E.

170. The Defendants knew that the detailed Image Analysis provided by the Authors contradicted the Defendants' conclusions because the Image Analysis conclusively proved that the images in Figures 1A, 6A, 3C, 4C, and 5E had not been reused.

171. The Defendants chose to disregard the findings set forth in the Image Analysis.

172. The Defendants chose to disregard the images provided by the Authors upon the Defendants' request.

173. The Defendants knew of, but chose to ignore, the findings of the forensic expert report which the Authors provided to the Defendants that contradicted Defendants' findings of image duplication.

174. Upon information and belief, Defendants disregarded their own policies and best practices for review of images when they held to their original conclusions, despite having been provided with high quality .TIFF files, despite having been informed that JBC's analysis conducted on .PDF files was improper, and despite the Authors repeated pleas to reanalyze the images as outlined by the Department of Health and Human Service's Office of Research Integrity.

175. Similarly, upon information and belief, the Defendants failed to perform histogram equalization, image segmentation, sobel gradient, thresholding, or any other relevant technique on any of the images that the Authors provided to the Defendants.

176. Given the contradicting data and analysis presented to Defendants, it was reckless for Defendants to believe it was acting on accurate information regarding Figures 1A, 6A, 3C, 4C, and 5E.

177. In fact, by Dr. Sakabe's own admission, Defendants knew they were making a determination as to the images based upon images of inadequate quality, but then refused to conduct further analyses after receipt of images of sufficient quality.

178. The Authors repeatedly made the Defendants aware of the falsity of their position, and counseled them to not publish the Retraction.

179. The Defendants investigation to ascertain the truth regarding the accuracy of the relevant images contained in the Article was grossly and recklessly inadequate, and, as such, Defendants acted with actual malice in publishing the Retraction.

180. Moreover, the same conduct alternately shows that the Defendants were negligent in their publication of the Retraction.

181. The Defendants actions have actually and proximately caused, and continue to actually and proximately cause, damage to the Authors, their reputations and livelihoods.

182. The public dissemination of the Retraction, and the defamatory statements it contains, affects an ongoing and continuous injury on the Authors reputations and personal wellbeing.

183. As such the Authors have a clear right to relief.

184. The Authors' reputations cannot be repaired or restored as long as the Defendants publically maintain, and hold out, the statements within the Retraction to be true when they are not.

185. No remedy at law will provide adequate relief in lieu of a withdrawal of the

Retraction.

186. Moreover, the ongoing and continuous nature of the injury inflicted by the Retraction has prevented and will continue to stymie the Authors' career advancement, the repair of their reputations, and the clearing of their names as honest and reputable scientists.

187. Should the Retraction be allowed to stand, even greater injury will result to the Authors' reputations, and their careers will continue to be unjustly derailed further.

WHEREFORE, Mr. Tarugu and Dr. Reddy request that the Court (i) enter judgment in their favor and against the Defendants, (ii) award a Permanent Injunction to Mr. Tarugu and Dr. Reddy enjoining the Defendants from publically displaying or further disseminating the Retraction, and requiring Defendants to otherwise withdraw the Retraction from all publically available sources, and (iii) award Mr. Tarugu and Dr. Reddy such other relief as this Court deems just and proper.

COUNT II
(Defamation Seeking Monetary Damages – The JBC)

188. The Authors incorporate by reference the foregoing paragraphs of this First Amended Complaint as if set forth at length herein.

189. Under Pennsylvania law, to succeed on a claim of defamation, a plaintiff must prove: (1) the defamatory character of the communication; (2) its publication by the defendant; (3) its application to the plaintiff; (4) the understanding by the recipient of its defamatory meaning; (5) the understanding by the recipient of it as intended to be applied to the plaintiff; (6) special harm resulting to the plaintiff from its publication; and (7) abuse of a conditionally privileged occasion. *Kelley v. Pittman*, 150 A.3d 59, 67 (Pa. Super. 2016) (quoting *Porter v. Joy Realty, Inc.*, 872 A.2d 846, 849 n. 6 (Pa. Super. 2005)); See also 42 Pa.C.S.A. § 8343(a).

190. By agreeing to publish the Retraction, the JBC caused the publication of three

false statements and misrepresentations of fact to scientific community.

191. Moreover, upon information and belief, the Defendants are directly responsible for, and proximately caused, @Sciblotter's mass dissemination of the three defamatory and false statements contained in the Retraction to thousands of members of the academic and scientific community.

192. The Retraction contains three distinct false and defamatory statements: (a) "The right pAcK-H3 and H3 immunoblots from Fig. 6A were reused in Fig. 1A as PPAR γ ," (b) "The right Lamin B1 immunoblot from Fig. 3C was reused in Fig. 4C as the right H3 immunoblot," and (c) "In Fig. 5E, the first lane from the lower β -actin immunoblot was reused in the right pMSK1 immunoblot."

193. The three statements in the Retraction can fairly and reasonably be construed to imply defamatory meaning in that each of the three offending statements is patently false, and are misrepresented as true facts.

194. The Authors did not, in fact, reuse images, rather they utilized individual, distinct, and unique images in and throughout the Article.

195. The statements indicate that the basis for the Article's retraction was the alleged reuse of images within the Article.

196. An accusation that an image has been surreptitiously reused in a scientific article is tantamount to an accusation of data falsification, research impropriety, and/or research misconduct, any of which constitute the ultimate breach of trust an author can commit within the scientific community.

197. Moreover, the defamatory meaning could not be more evident to the Authors, or to the greater scientific community, for the impression it would naturally engender in the minds

of the average persons among whom it was intended to circulate -- the Authors' academic peers -
- is obvious as both harmful and untrue.

198. Adding insult to injury is the fact the Retraction was non-consensual.

199. The Retraction directly implicates and directly applies to the Authors because the Retraction lists the Authors by name.

200. Moreover, any recipient of the Retraction (i.e., a reader of the Retraction), would readily understand that the Retraction applies to the Authors as it lists the Authors by name.

201. That the Authors were not distinctly identified as the individuals implicated by the false and defamatory statements in the Retraction is immaterial.

202. Within the sphere of academia (the audience for the publication of the journal at issue) the meaning of each of the three individual defamatory statements is clear -- the authors of the Article were found to have improperly reused images in the Article, specifically those referenced in each of the statements in the Retraction.

203. Any career academic would reasonably understand the gravity of such a statement being published to the public at large, and the reputational harm and impact it would cause and continue to cause.

204. Due to the publication of the Retraction by the JBC, the Authors have already suffered significant impairments to their reputation and standing within the University community, as well as within the greater academic community as a whole.

205. The Authors have had professional opportunities delayed and or revoked, as well as additional publication opportunities jeopardized.

206. Any future work by the Authors or other scientists based on the conclusions of this Article will be questioned (even when the results of the Article are reproduced), because a

reader of the Retraction will have no ability to ignore the false statements published in the Retraction.

207. In addition, the retraction of the Article has caused the Authors to suffer severe mental anguish and personal humiliation.

208. The JBC abused its conditionally privileged status, if any, when it recklessly disregarded the truth by publishing Retraction, or at a minimum, negligently disregarded the truth, despite the falsity of the three statements contained therein.

209. In addition to the codified requirements set forth in 42 Pa.C.S.A. § 8343(a), the United States Supreme Court has held that while “the States may define for themselves the appropriate standard of liability for a publisher . . . of defamatory falsehood injurious to a private” plaintiff, they may only do “so long as they do not impose liability without fault.” *Gertz v. Robert Welch, Inc.*, 418 U.S. 323, 347, 94 S. Ct. 2997, 3010, 41 L. Ed. 2d 789 (1974).

210. The Pennsylvania Supreme Court has stated that where the plaintiff is a private figure plaintiff, the plaintiff must, at a minimum, prove the defendant was negligent in its publication. *Joseph v. Scranton Times L.P.*, 129 A.3d 404, 428 (Pa. 2015); *see also Rutt v. Bethlehems’ Globe Pub. Co.*, 484 A.2d 72, 83–84 (Pa. Super. 1984) (“We hold that a private figure defamation plaintiff . . . must prove that the defamatory matter was published with ‘want of reasonable care and diligence to ascertain the truth’ or, in the vernacular, with negligence.”); *Tucker v. Philadelphia Daily News*, 848 A.2d 113, 130, n.22 (Pa. 2004) (“a private individual is not required to prove actual (constitutional) malice, but may recover upon a showing of negligence.”).

211. Unlike private figures, “the Supreme Court has mandated that public figures are required to demonstrate ‘actual malice’ on the part of the publisher by clear and convincing

evidence in order to recover under state defamation law.” *Mzamane v. Winfrey*, 693 F.Supp.2d 442, 497 (E.D. Pa. 2010) (citing *New York Times v. Sullivan*, 376 U.S. 254, 279–80 (1964)).

212. The “actual malice” standard has been applied to limited purpose public figures as well. *See Tucker v. Philadelphia Daily News*, 848 A.2d 113, 130, n.22 (Pa. 2004).

213. A finding of actual malice is appropriate where a defendant had obvious reasons to doubt the veracity of the information up which they relied in their publication, “such as where the defendant is aware of internal inconsistencies or has access to apparently reliable information that contradicts the defamatory assertions.” *Mzamane*, 693 F.Supp.2d at 497.

214. The Authors can be considered private individuals for purposes of defamation (a) because the Retraction fails to address the sum and substance of the Article, and (b) because the controversy at issue was expressly confidential and private as between the Authors, the University, the VA ORO, and, ultimately, the JBC.

215. To the extent that the Authors are determined to be private individuals for purposes of their defamation claim, the Author must prove that JBC, in publishing the Retraction, failed to exercise reasonable care and diligence to ascertain the truth of the statements contained in the Retraction.

216. To the extent that the Authors are determined to be limited purpose public figures, the Authors must prove that the JBC, in publishing the Retraction, acted with actual malice.

217. The JBC knew that findings of the University and the VA ORO only pertained to Figure 5E, and did not opine as to Figures 1A, 6A, 3C, and 4C.

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219. The JBC knew that the detailed Image Analysis provided by the Authors

contradicted the JBC's conclusions because the Image Analysis conclusively proved that the images in Figures 1A, 6A, 3C, 4C, and 5E had not been reused.

220. The JBC chose to disregard the findings set forth in the Image Analysis.

221. The JBC chose to disregard the images provided by the Authors upon the JBC's request.

222. The JBC knew of, but chose to ignore, the findings of the forensic expert report which the Authors provided to the Defendants that contradicted Defendants' findings of image duplication.

223. Upon information and belief, the JBC disregarded their own policies and best practices for review of images when they held to their original conclusions, despite having been provided with high quality .TIFF files, despite having been informed that the JBC's analysis conducted on .PDF files was improper, and despite the Authors repeated pleas to reanalyze the images as outlined by the Department of Health and Human Services' Office of Research Integrity.

224. Similarly, upon information and belief, the JBC failed to perform histogram equalization, image segmentation, sobel gradient, thresholding, or any other relevant technique on any of the images that the Authors provided to the JBC.

225. Given the contradicting data and analysis presented to the JBC, it was reckless for the JBC to believe it was acting on accurate information regarding Figures 1A, 6A, 3C, 4C, and 5E.

226. In fact, by Dr. Sakabe's own admission, the JBC knew it was making a determination as to the images based upon images of inadequate quality, but then refused to conduct further analyses after receipt of images of sufficient quality.

227. The Authors repeatedly made the JBC aware of the falsity of its position, and counseled them to not publish the Retraction.

228. The JBC investigation to ascertain the truth regarding the accuracy of the relevant images contained in the Article was grossly and recklessly inadequate, and, as such, the JBC acted with actual malice in publishing the Retraction.

229. Moreover, the same conduct alternately shows that the JBC was negligent in its publication of the Retraction.

230. The JBC's actions have actually and proximately caused, and continue to actually and proximately cause, damage to the Authors, their reputations and livelihoods, and has caused the Authors to suffer severe mental anguish and personal humiliation.

231. The public dissemination of the Retraction, and the defamatory statements it contains, affects an ongoing and continuous injury to the Authors reputations and personal wellbeing.

WHEREFORE, Mr. Tarugu and Dr. Reddy request that the Court (i) enter judgment in their favor and against the JBC, (ii) award damages to Mr. Tarugu and Dr. Reddy in an amount to be determined at trial, but otherwise in excess of Seventy-Five Thousand Dollars (\$75,000.00), and (iii) award Mr. Tarugu and Dr. Reddy such other relief as this Court deems just and proper.

COUNT III
(Defamation Seeking Monetary Damages – The ASBMB)

232. The Authors incorporate by reference the foregoing paragraphs of this First Amended Complaint as if set forth at length herein.

233. Under Pennsylvania law, to succeed on a claim of defamation, a plaintiff must prove: (1) the defamatory character of the communication; (2) its publication by the defendant;

(3) its application to the plaintiff; (4) the understanding by the recipient of its defamatory meaning; (5) the understanding by the recipient of it as intended to be applied to the plaintiff; (6) special harm resulting to the plaintiff from its publication; and (7) abuse of a conditionally privileged occasion. *Kelley v. Pittman*, 150 A.3d 59, 67 (Pa. Super. 2016) (quoting *Porter v. Joy Realty, Inc.*, 872 A.2d 846, 849 n. 6 (Pa. Super. 2005)); See also 42 Pa.C.S.A. § 8343(a).

234. By agreeing to publish the Retraction, the ASBMB caused the publication of three false statements and misrepresentations of fact to scientific community.

235. Moreover, upon information and belief, the Defendants are directly responsible for, and proximately caused, @Sciblotter's mass dissemination of the three defamatory and false statements contained in the Retraction to thousands of members of the academic and scientific community.

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(\$75,000.00), and (iii) award Mr. Tarugu and Dr. Reddy such other relief as this Court deems just and proper.

Respectfully submitted,

COHEN SEGLIAS PALLAS
GREENHALL & FURMAN, P.C.

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*Attorneys for Plaintiffs,
Mr. Aravind Tarugu and Dr. Raju Reddy*

Dated: 11/25/2019

CERTIFICATE OF SERVICE

I certify that on this 25th day of November, 2019, a copy of the foregoing *First Amended Complaint* was electronically served on all registered parties using the Court's ECF system, including:

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*Attorneys for Defendants Journal of
Biological Chemistry and American Society
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